A.D. 1834 . . . . N° 6635.

SPECIFICATION

OF

JOHN BARTON, SAMUEL NYE, AND JOSEPH NYE.

STOMACH PUMPS, &c.

LONDON:
PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY:
PUBLISHED AT THE GREAT SEAL PATENT OFFICE,
25, SOUTHAMPTON BUILDINGS, HOLBORN.
Price 9d.
1856.

A.D. 1834 . . . . N° 6635.

Stomach Pumps, &c.

BARTON, NYE, AND NYE'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, we, John Barton, of Providence Row, Finsbury, Engineer, and Samuel Nye and Joseph Nye, both of Saint Andrew's Road, Southwark, in the County of Surry, Mechanics, send greeting.

WHEREAS His present most Excellent Majesty King William the Fourth, by His Letters Patent under the Great Seal of Great Britain, bearing date at Westminster, the First day of July, in the fifth year of His reign, did, for Himself, His heirs and successors, give and grant us, the said John Barton, Samuel Nye, and Joseph Nye, His special licence, full power, sole privilege and authority, that we, the said John Barton, Samuel Nye, and Joseph Nye, our ex̃ors, adm̃ors, and assigns, or such others as we, the said John Barton, Samuel Nye, and Joseph Nye, our ex̃ors, adm̃ors, or assigns, should at any time agree with, and no others, from time to time and at all times during the term of years therein mentioned, should and lawfully might make, use, exercise, and vend within England, Wales, and the Town of Berwick-upon-Tweed, our Invention of "Improvements in the Construction and Application of Pumps and Machinery for Raising Fluid and other Purposes;" in which said Letters Patent is contained a proviso, that we, the said John Barton, Samuel Nye, and Joseph Nye, or one of us, shall cause a particular description of the nature of our said Invention, and in what manner the same is to be performed, to be inrolled in His said Majesty's High Court of Chancery within six calendar months next and immediately after the date of the said in part recited Letters Patent, as in and by the same, reference being thereunto had, will more fully and at large appear.

NOW KNOW YE, that in compliance with the said proviso, we, the said John Barton, Samuel Nye, and Joseph Nye, do hereby declare that the nature of our Invention, and the manner in which the same is to be performed, are fully described and ascertained in and by the following description thereof, reference being had to the Drawings hereunto annexed, and to the figures and marked thereon; that is to say:—

Description of the Drawing.

Figure 1 represents a pump constructed according to our first improvement, and its peculiar novelty consists in the arrangement of four valves, one above the other, whereby the single barrel of the pump is made to be a double-acting pump; that is to say, at the time of working the pump a constant stream will flow from the eduction pipe, whether the same be made on a large or small scale. The one shewn in the Drawing is intended as a syringe for the purposes of a stomach pump, or for administering glisters. A is the ordinary barrel of the pump; B, the piston; C, the piston rod; D, the induction or what is called the suction pipe; E is the induction valve to the upper part of the pump barrel; and F is the eduction valve from the upper part of the pump barrel. These two valves E and F, it will be seen, are contained in the chamber or compartment G, such compartment being connected with the upper part of the pump barrel by the tube or trunk H, and the water is forced from the compartment G through the pipe I, which is connected to the main eduction way of the pump. J is the induction valve to the under part of the pump barrel; and K is the eduction valve to the under part of the pump barrel; and L is the eduction pipe or way by which the fluid from both sides of the piston is driven out; and according to the use to which such pump or syringe is applied, so will be the tube affixed to the eduction way L. By this arrangement it will be evident that a very compact pump, and particularly syringes for stomach pumps and other purposes, may be used, as by this means a double-acting pump will be readily obtained, which will offer great compactness, which is particularly desirable in such like instruments. And the improvement claimed under this first part of our Invention is, the application of the four valves placed above each other, as above described. It will be seen that there are two other arrangements of pumps shewn in the Drawing, in each of which the arrangement of valves are similar to Fig. 1; but we lay no claim to any of the parts shewn, excepting the arrangement of the valves.

Figure 2 represents the second improvement, which is applied to a single acting pump or a syringe for a stomach pump, or for administering glisters or other fluids. In this instance only one valve, the eduction valve, is contained in the pump barrel, the eduction valve being contained in the branch or eduction pipe. By this means the eduction valve will be unscrewed or otherwise separated from the barrel of the pump. A is the barrel of the pump; B, the piston; and C, the piston rod; D, the eduction way; and E, the suction or induction pipe, in all which particulars this pump or syringe differs not from ordinary syringes. G is the eduction pipe which screws into the barrel of the pump. H is the eduction valve contained in the eduction pipe, as shewn in the Drawing; and it is the placing of such eduction valve within the eduction tube, in place of the pump itself, and whereby when the same are separate one from the other, and admit of packing more compactly than ordinary pumps or syringes of a like kind.

Our third improvement is shewn in Figure 3, which consists in placing a syringe or pump within the vessel which is to contain the fluid to be administered, whereby the same space which will be required for the conjoined instrument will be only that which is occupied by the outer vessel itself. A is the syringe of any of the ordinary construction, affixed within the vessel B, which is intended to contain the fluid, and our Invention does not consist in either the pump A or the vessel B, in their separate condition; but we do claim the combining and affixing the syringe A within the vessel B, as shewn in the Drawing.

Our fourth improvement consists in an improvement on the eduction pipe or tubes of syringes for stomach pumps, or for administering glisters or other fluids (that is to say), in constructing the eduction pipe with universal joints, by which metallic tubes may be used as the eduction tubes of syringes. Figure 4 shows this improvement. A is the part by which the tube is connected to the barrel of the syringe. B, B, is the tube which may be made to any required length, and may have any number of joints. C, C, are two portions of spheres which work within the spherical sockets D, D, which are formed of two parts which screw together, by which the parts C, C, are admitted into the sockets; these parts are to be accurately made by grinding or otherwise. And our fourth improvement consists in the application of joints to the eduction pipes of syringes, whereby such pipes may be made of metal, at the same time still offer sufficient movement to adapt the same to the positions required.

Figure 5 represents our fifth improvement, and consists in an improvement added to an ordinary apparatus for supplying lubricating fluid to the bearings of machinery. A is the vessel to contain the fluid; B, the tube down which the woollen threads descend, in order that that part may convey the fluid to the bearing of the machinery to which it is applied. So far the apparatus is similar to those in ordinary use, and constitutes no part of our Invention. C is a float, having a tube D which slides over the tube B. The threads of worsted are supported on the float, and rise and fall, by which the height up which the lubricating fluid has to rise before it descends to the bearing of the machinery will be the same. And our Invention, which is claimed under the fifth point of our Invention, consists in the application of the float C, for the purpose of regulating the height at which the lubricating fluids have to rise up the shorter leg of the worsted threads before it descends to the bearing of the machine to which it is to be applied.

In witness whereof, we, the said John Barton and Joseph Nye, have hereunto set our hands and seals, this Thirty-first day of December, in the year of our Lord One thousand eight hundred and thirty-four.

JN° BARTON. (L.S.) JOSEPH NYE. (L.S.)

FARRER.

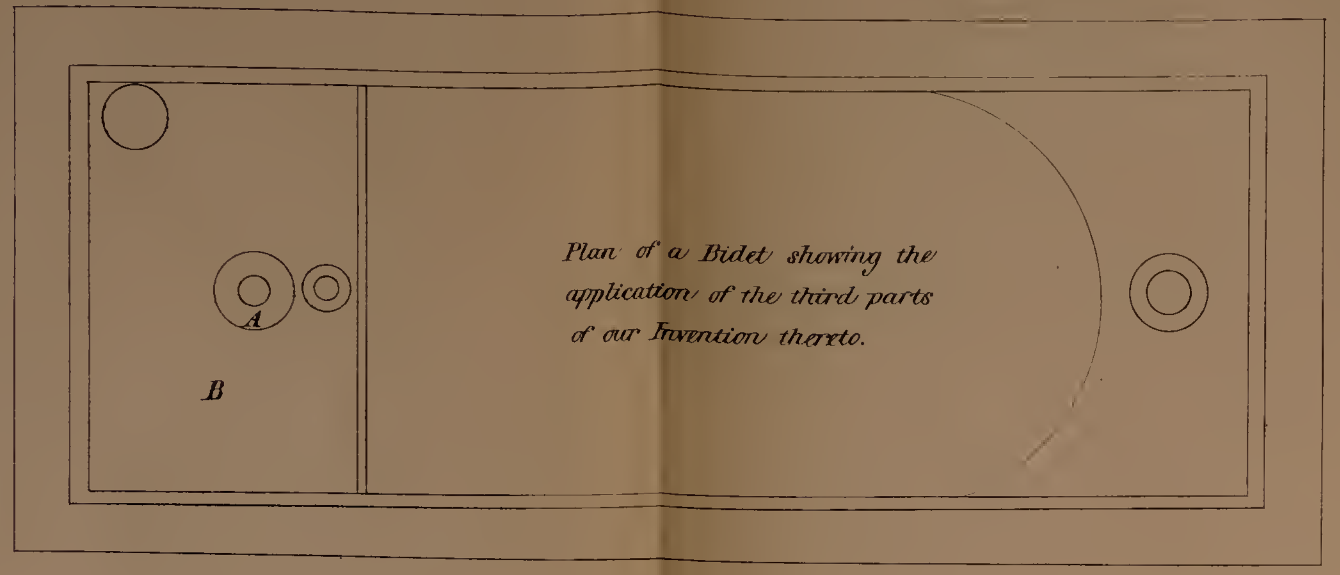
AND BE IT REMEMBERED, that on the Thirty-first day of December, in the year of our Lord 1834, the aforesaid John Barton came before our said Lord the King in His Chancery, and acknowledged the Specification aforesaid, and all and every thing therein contained and specified, in form above written. And also the Specification aforesaid was stamped according to the tenor of the Statute made for that purpose.

Inrolled the First day of January, in the year of our Lord One thousand eight hundred and thirty-five.

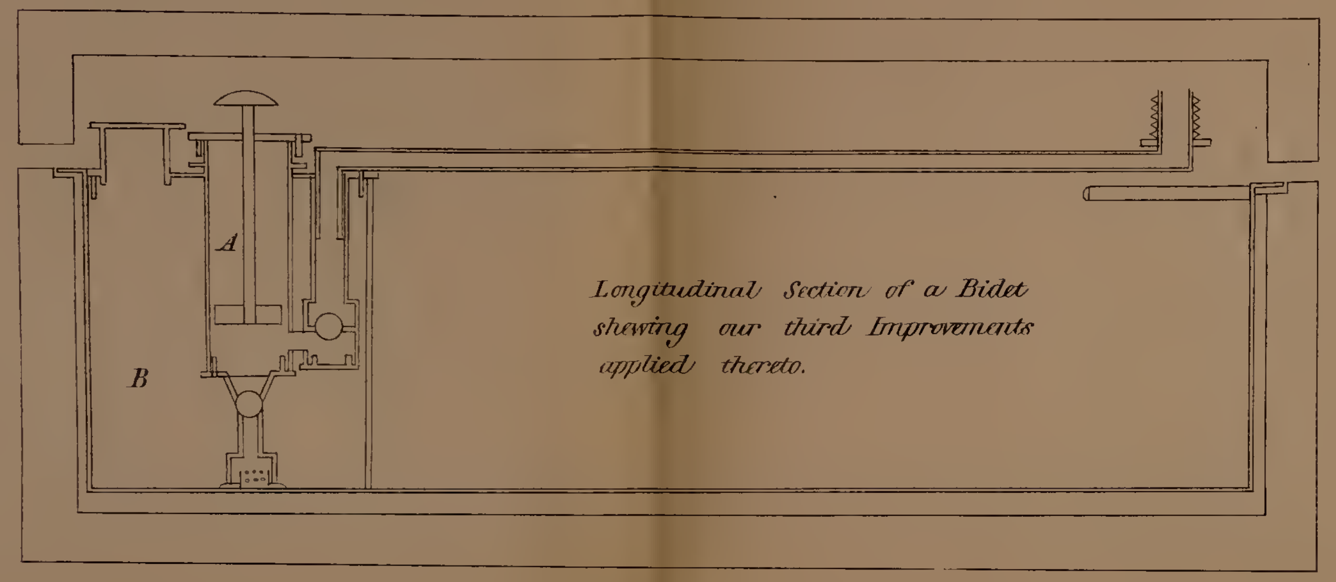
LONDON:
Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1856.

A.D. 1834. July 1. Nº 6635.
BARTON & S & J. NYE'S SPECIFICATION.

(1 SHE

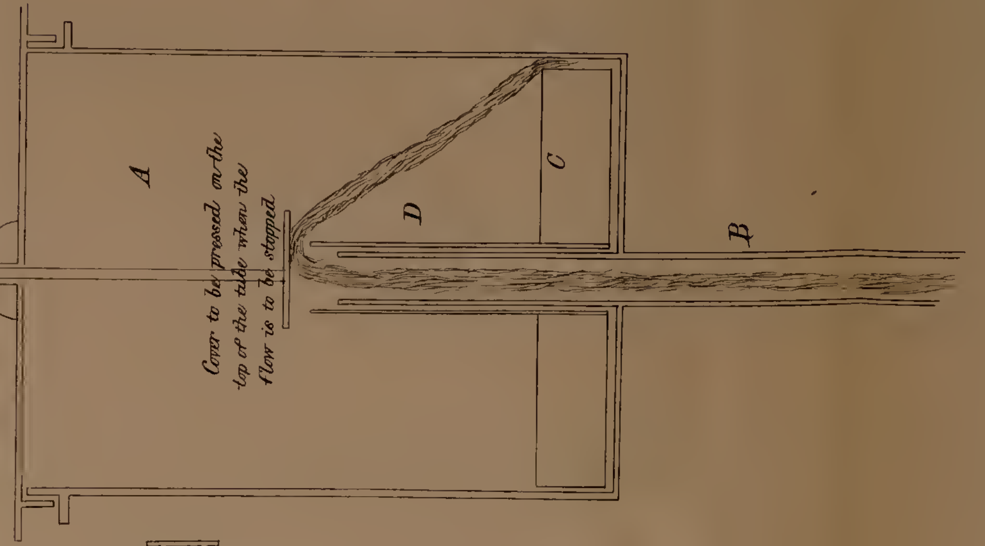


Plan of a Bidet showing the application of the third parts of our Invention thereto.



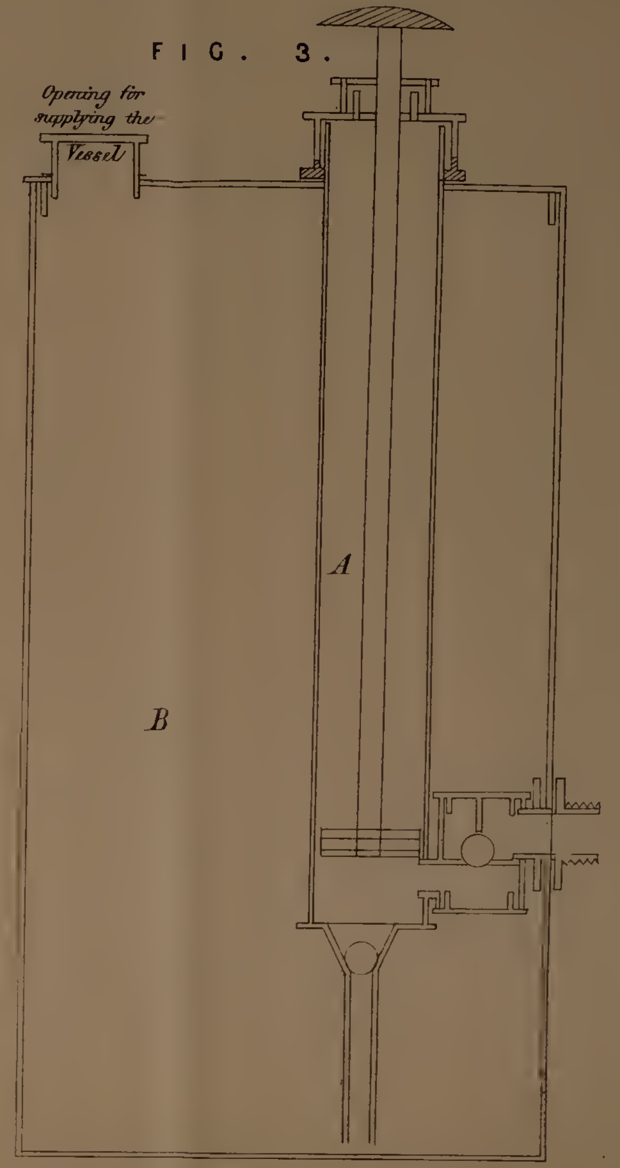
Longitudinal Section of a Bidet shewing our third Improvements applied thereto.

FIG. 5.



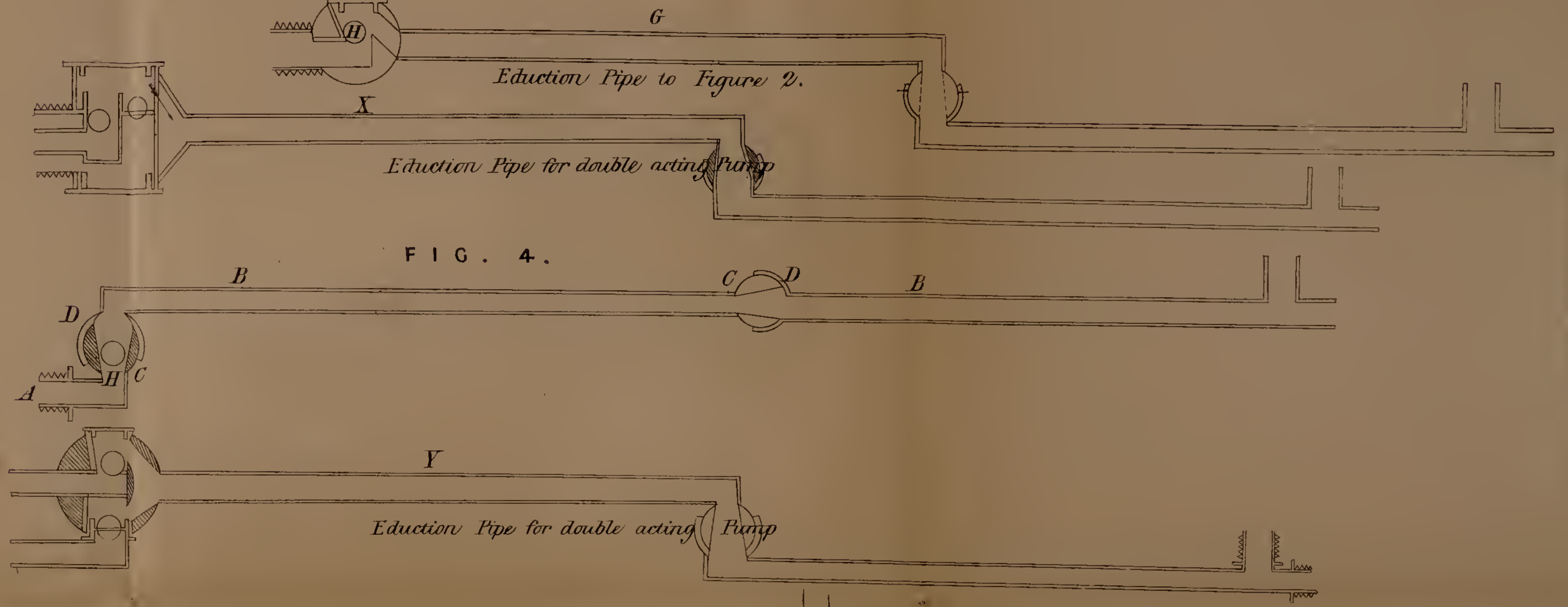
Cover to be pressed on the top of the tube when the flow is to be stopped

FIG. 3.



Opening for supplying the Vessel

FIG. 4.

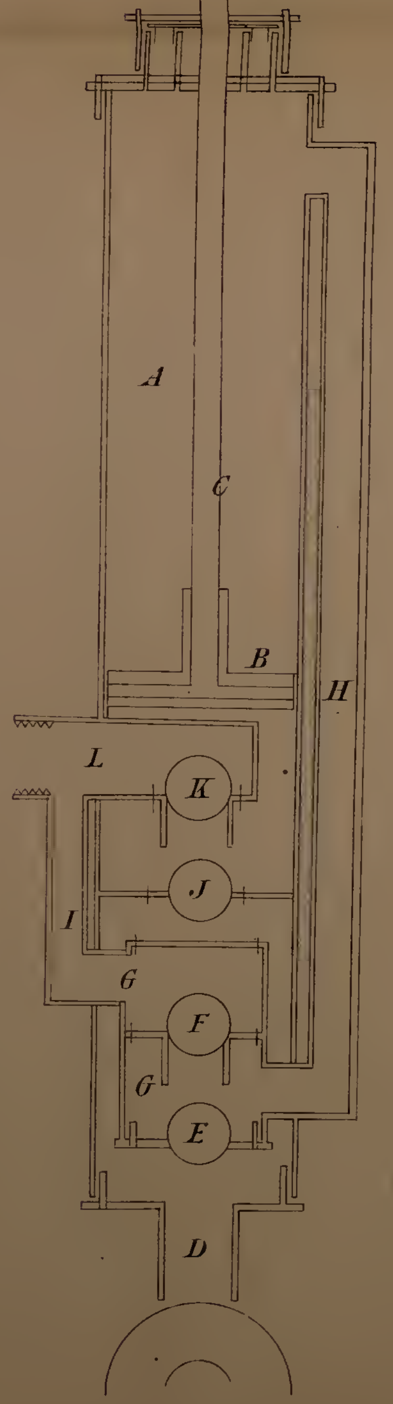


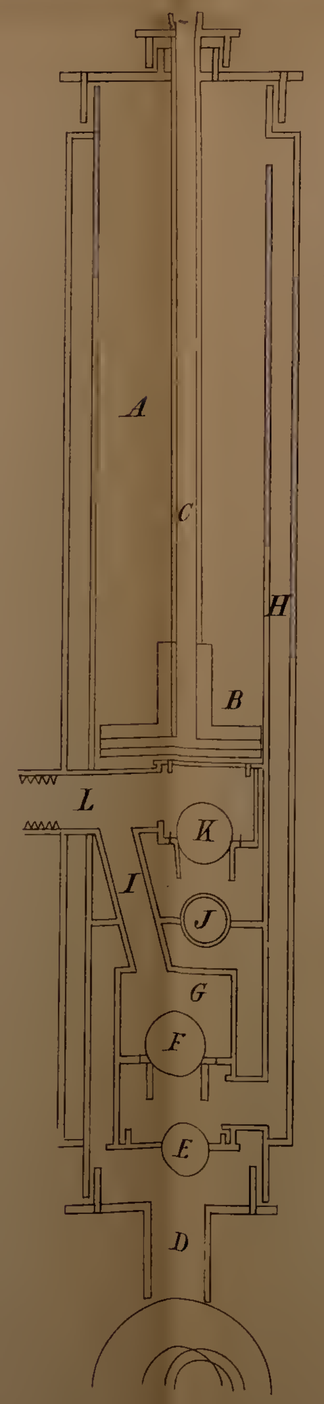
Eduction Pipe to Figure 2.

Eduction Pipe for double acting Pump

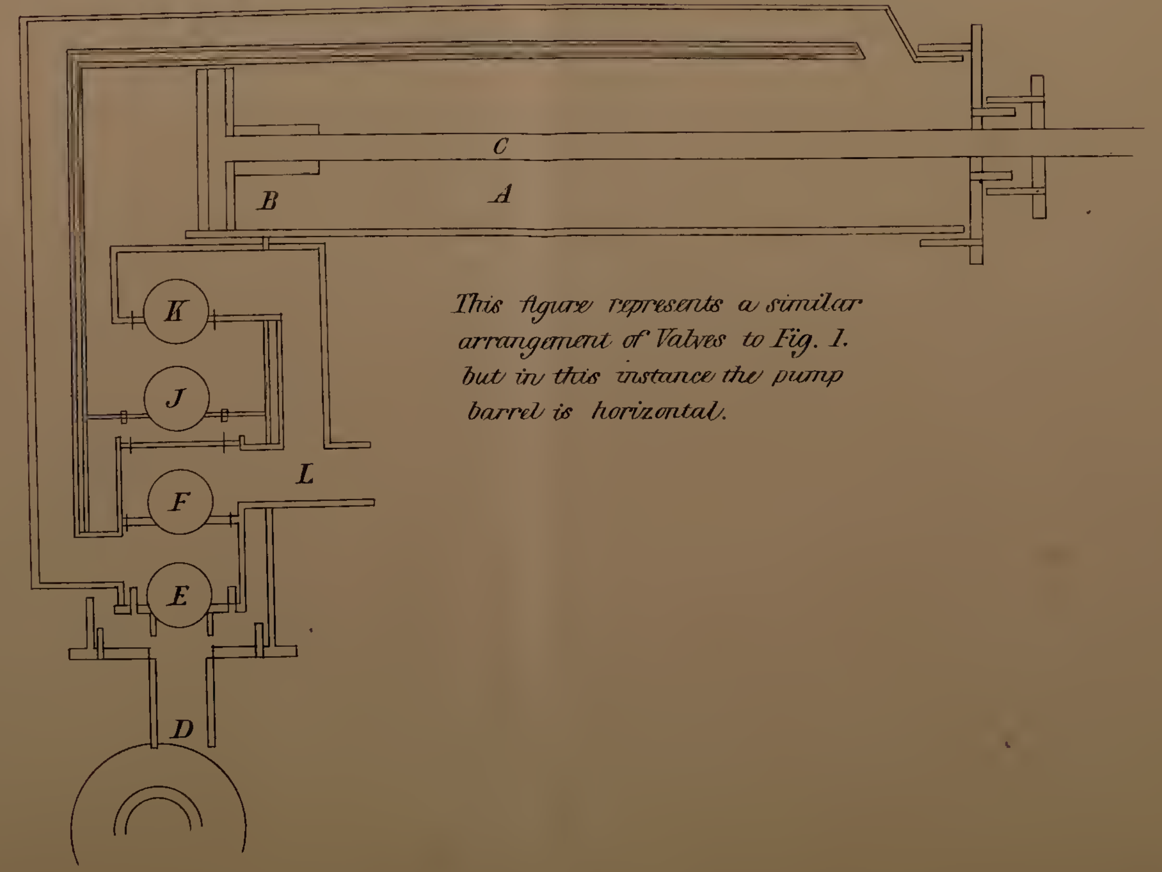
Eduction Pipe for double acting Pump

FIG. 1.

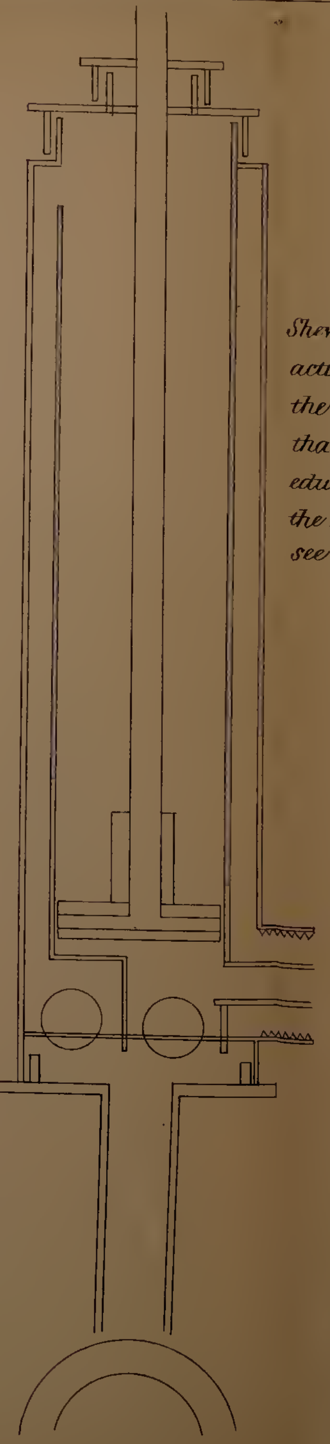




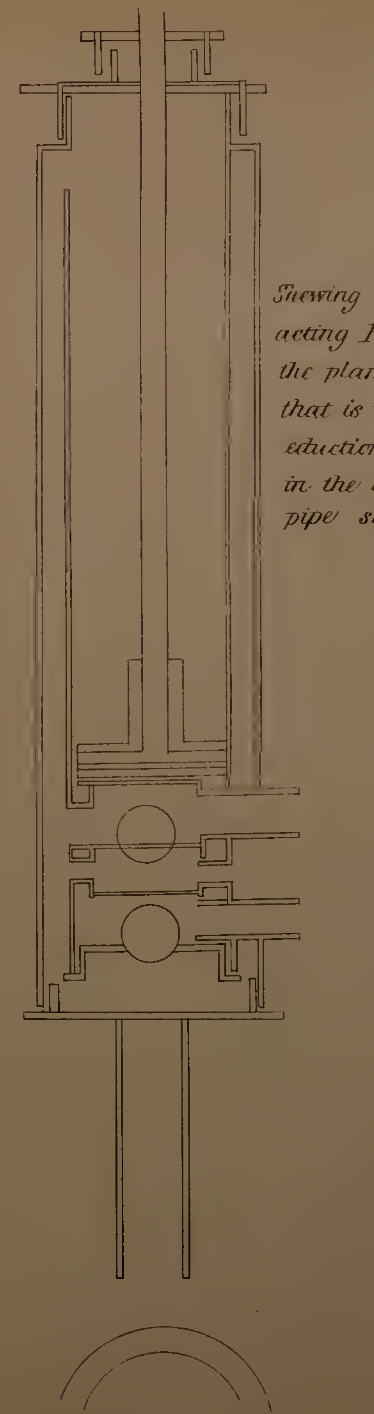
This figure shews a slight variation from Fig. 1, the water way H wholly surrounding the pump barrel.



This figure represents a similar arrangement of Valves to Fig. 1. but in this instance the pump barrel is horizontal.

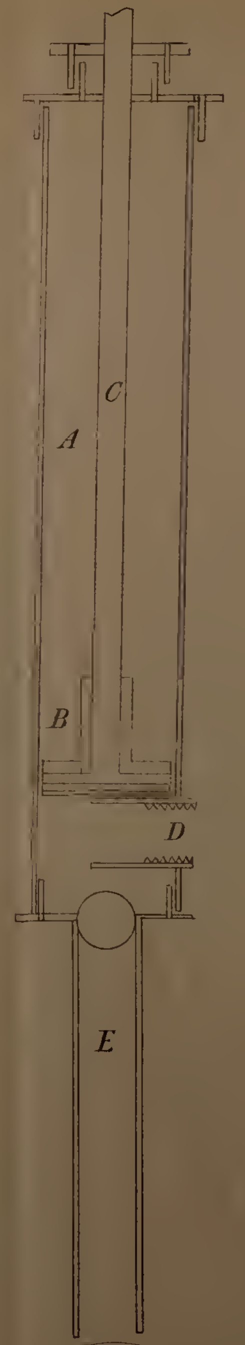


Shewing a double acting pump on the plan of Fig. 2 that is with the eduction valves in the eduction pipe see X.



Shewing a double acting Pump on the plan of Fig. 2. that is with the eduction valves in the eduction pipe see Y.

FIG. 2.



The enrolled drawing is partly colored.

Drawn on Stone by Malby & Son

LONDON: Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1856.